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Norman, John Henry

A colloquy upon the
science of money

London

1889

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A COLLOQUY 22-10-89

UPON THE

SCIENCE OF MONEY.

*Had it not been for the fact that it was
published in the States?*

J.H.N.

BY

JOHN HENRY NORMAN.

LONDON:

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1889.

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A COLLOQUY

UPON THE

SCIENCE OF MONEY.

SCENE.—*A Bank Parlour not 200 yards from the Royal Exchange.*

TIME.—*Eleven o'clock on Monday morning.*

PRESENT.—*Mr. Monnummus, Mr. Binnummi, Mr. Creditus, and Mr. Mesites, Bullion Coin and Exchange Dealer (Mr. E.).*

Mr. M.—Glad to see you, friends, thus early. You know what the present Chancellor of the Exchequer said recently?

Mr. C.—Oh, yes. In July 1887 he told his constituents in St. James' Hall that this vexed question of bi-metallism, with others, would have his attention in the autumn, and that the Government could not allow the questions to drift without bringing them at last to a real authoritative decision.

Mr. M.—I was not thinking of that. But as

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you mention it, I must say he seems a long time in accomplishing what he intended. Perhaps, as he is a cautious politician, now that the Grand Old Man has spoken, he may find it within his power to speak out also, especially since a scientific man has given him his opinion that in his (Goschen's) advice to mono-metallists to agitate the country against local dual standards, he has recommended them to embrace an impossible idea and then to agitate against it. I always maintain against the bi-metallists, who claim the Chancellor as one of them, that unless he has swallowed his principles he cannot agree with them; and as yet I have read nothing to cause me to change my opinion that he is on the side of John Locke and his disciples. No; I was not thinking of that, but of an utterance of his made not long ago, when at a banquet of commercial men he declined their invitation to address them on the local dual standard question, and quoted the saying of Sydney Smith that "Currency and exchanges, next to love and religion, fill our lunatic asylums."

Mr. C.—Ah, I remember that; and now I perceive that you have been wise in getting us together thus early on a Monday morning when, if at any time, our brains should be best fitted to discuss this subject of money.

Mr. B.—I think that we bi-metallists may be well satisfied with the great strides our cause is making. The opposition of the members of the Royal Gold

and Silver Commission of 1886-9, who advocate a local single standard, is so feeble that they have as good as given up the case to us. They seem to think a lasting fixture of relation between gold and silver possible, and that both metals can be preserved as concurrent local standards. To be sure, Professor Marshall's opinion is dead against them; but then we have Professor Nicholson on our side, and I think his arguments are unanswerable.

Mr. M.—I hear on all sides of the great disappointment which the Commission has caused. The Americans are disgusted with it. Still, I do not think that you have much to boast of. You have admitted that gold and silver are stores of value; by which, I suppose, you mean that as cultured marketable land has cost value and exchange value, so both gold and silver have cost value and exchange value, and that, as a rule, each commands equivalent value in exchange for other commodities, &c. This, in my opinion, is a great advance upon an important part of the local dual standard creed, which was that the effigy upon the coin gives it exchange value and that the fiat of a Government can give value to a thing, which is contrary to all economic teaching.

Mr. C.—Well, as far as the report goes, I am delighted with the second Blue Book of 276 pages out of a total of 1,057 pages. This gives the proper weight to credit instruments. The Commissioners are particularly happy in advancing and giving such prominence to Mr. Dunning Macleod's views, which I

have always held to be sound and unassailable. I believe that our intelligent go-ahead kinsmen in America are right when they assert that the soundest and safest currency, as a standard, is notes denominated "Greenbacks," for is not the wealth of the U.S.A. illimitable? Harvey, the disciple of the great Bishop Berkeley on currency, was not far wrong in his views at the beginning of the last century, which may be judged of by his questions, two of which are, "Whether working men would not be wise to agitate for a money based upon labour rather than pure gold; and whether gold is not the money of barbarism?" I think I detect somewhat of the same view in the assertion made by some people that *gold and silver are only small change*.

Mr. B.—I entirely disagree with you, and I am prepared to dispute your arguments. It is most important that the basis of all credit instruments should be metal. I hold that both gold and silver, tied together by a fixed relation now and for ever, if all nations and peoples would see it and adopt it, is a safer monetary standard for a country than one metal alone can be.

Mr. M.—I do not agree with either of you. I am prepared to demonstrate that a scientific standard for monetary purposes, as a measure of value and a means of payment, must be automatic in its action, and that it cannot consist of two substances in one country.

Mr. C.—Well, I am quite prepared to argue the question. I will begin, and ask—What is money?

and I should answer it out of the *Encyclopædia Britannica*. In the article under the head of "Money," which was written, I believe, by the Professor of Political Economy, Trinity College, Dublin, the opinion of Professor F. A. Walker, of the John Hopkins University, U.S.A., is quoted with approval. It is as follows: "Money is that which passes freely from hand to hand throughout the community in final discharge of debts, and full payment for commodities, &c., being accepted equally without reference to the character or credit of the person who offers it, and without the intention of the person who receives it to consume it or enjoy it, or apply it to any other use than in turn to tender it to others in discharge of debts or payment for commodities." I agree entirely in this. Greenbacks answer the conditions, and any other state credit instruments can do the same. Pieces of paper are the true standard substance, but it is as well to have some gold and silver as small change.

Mr. B.—I have never believed in the views held by the Birmingham School on currency. I have read a good deal of the history of inconvertible paper in the United States of America and continental countries, and I am convinced that a sound monetary system must be based on metal, gold and silver concurrently in a country being the best basis. The amount of misery which inconvertible paper has produced has forced me to this conclusion. I do not like Walker's definition of money, and I think I could give a better one; but as it

would embrace my system equally with the monometallic system, I offer no objection to it.

Mr. C.—I am glad I am in harmony with you, Binmami, thus far on the definition of money. But in contrasting my system with yours, it always appears to me that the Legislature of a country would act very inconsistently by carrying out your plan of fixing a relation between gold and silver.

Mr. B.—How so ?

Mr. C.—You may not perhaps know that I consider it positively unjust that the Legislature prevents me, or anyone but a certain definite number in the country, from issuing notes payable on demand to the extent of the credit which I or others possess, whereas, under your system, a fixed relation affords an unjust protection to the producer of gold or of silver: may-be silver at one time, and gold at another. But worse than that. If the history of the past is to be taken as any guide to the future, the cost value of silver in relation to the cost value of gold has been, and is, continually falling, and no man can possibly predict what the bottom of the fall may be. If the silver producers have this protection in competition with the gold producers, why should not I have freedom of action, which I consider only just, on the principles of free trade, with regard to the issue of notes by me payable on demand? In this matter of money there seems to me a great deal of favouritism and unfairness, which I should like to see swept away, and every man allowed to act as he pleases.

Mr. M.—With regard to that which you have expressed in connection with the definition of money given by Professor Walker, I am not surprised that you both feel that you are safe in considering that your different views come under it; but I am entirely dissatisfied with the definition. I maintain that there is a science of credit and a science of money. I trust that neither of you will consider that I am not alive to the tremendous importance of credit, or trust, by word or by instruments; I would be the last person to under-rate the mighty effects of credit instruments, and the vast benefits conferred upon mankind by the use of them. Suppose that to-morrow morning the inhabitants of the British Isles awoke without any faith in credit instruments and banks, and positively declined any intermediary but standard metal, and that the banks should be beset for the £580,000,000 deposits and current accounts held by them. All payments must stop, and bankruptcy and barter ensue; and thus it would continue until the nation found faith again in credit instruments and banks. Were there standard metal enough to be the intermediary in all interchanges which credit instruments and metal now conjointly effect, the cumbrousness of the metal medium would impede business to such an extent that the occasional distrust of credit instruments would be preferable to carrying on business without credit. Though this is my opinion, I hold with Senior: "*Credit amounts merely to this: that B has in his hands part of the property of A.*" Money in John Locke's time meant coins

of gold, silver and copper. In Peel's time it meant gold, silver and copper coins, and bank notes. Now nobody knows what it means. Some say it is anything having the power to enhance prices, as a word of promise of payment for an article taken. This would include all instruments of credit and book debts. The political economists and the bankers are at variance upon the constituents of money. The former assert that the £580,000,000 of deposits are money, which the latter deny. I should be disposed to think that only the part of the deposits which are active could be considered as currency: such as take the shape of all manner of credit instruments that can be handled. Credit instruments, in a sound monetary system, are only the signs of the standard substance. They are no part of a sound monetary system longer than it is believed that they will be paid in the standard substance, and when they are paid they are no longer part of the monetary system. It should be constantly borne in mind that a standard of value and means of payment spring from the wants of a people, who should themselves select it. This they generally do, and are aided by the Government with laws to obtain and preserve it. A suitable standard of one period may become unsuitable from change in the habits and wants of the people, or a change in connection with the substance, at another period. Whether both gold and silver, or either, will continue to be standards must depend upon the cost of production, together with quantities taken from the earth. Gold in unlimited quantities, and silver in un-

limited quantities at cost values, equivalent to 100s. per lb. and 80s. per cwt. respectively, would not perhaps suit as measures of value and means of payment. All that can be done is to take the best substance to be had for the time being.

Mr. C.—Really, what you advance strongly supports me in my preference for a credit instrument standard.

Mr. M.—There could be a scientific system of credit substances without any metal whatever, but it would be of an autocratic register character. "Suppose countries A and B possess equally well organised banking systems, but no intrinsically valuable currency or reserves; that in A the unlimited legal tender and final discharger of debts consists of excessive issues by the State of stamped pieces of paper, whilst in B it consists of moderate issues by the State of stamped pieces of leather. Within certain limits interchanges of raw or manufactured articles, stocks, shares, bonds, &c., could be as freely effected as though the instrumentality of gold and silver were employed. The larger quantity of stamped paper in A, constituting price, than of stamped leather in B would have no deterrent effect upon the exchanges. The high prices for which the goods, &c., of B sold in A would have to be given for the goods, &c., desired by B, and the low prices of its goods, &c., sold in B, would have to be given for the goods, &c., desired by A of B. The impediment to commerce would arise when the goods, &c., of one country are required by the other in excess of demand for goods, &c., on the part of the country

of whom the requirement is made ; since the paper of A would have no value in B, nor the leather of B in A. Fullion or coin would meet this difficulty. There could be no such exchange relation between these countries as substances of value embodied, say, in gold and silver, at present affords. The State would alone be the issuer and might commit great injustice, either wilfully or in ignorance, by the autocratic issue of quantities of credit substances. There could be no adjustment such as an automatic metal standard affords, through its power as a regulator of the international exchanges. The science of a pure credit system would consist in adjusting the issues to new circumstances and the varying wants of the people. This would appear to be beyond the power of any Government or bank to accomplish. Before proceeding to what I consider to be a scientific definition of money, I should like to advert to barter.

Mr. C.—I am glad that you referred to this, because it has always helped to confirm me in my views of free note issues. An axiom of political economy is that whatever may be the monetary system of a country, whether it be good or bad, a purely credit system such as you have described, a purely metal system, or a combination of the two, the conditions of barter will always be preserved. In other words, the value-giving factors embodied in anything, will exchange for the value-giving factors embodied in anything, whatever may be the changes in the credit, metal, or combined intermediary. The inter-

mediary will be moulded to the conditions of barter. (See *J. S. Mill*, Book III., chap. xii., last paragraph.) I always make use of this at the present time, and I ask, why all this fuss about a scientific automatic metal standard for monetary purposes? The conditions of barter cannot be affected by any monetary system, good or bad. I cannot see, therefore, why my credit system is not the very best of all.

Mr. B.—There is no doubt that the truth of the axiom just quoted has never been questioned; but it is difficult to see the operation of it. A present writer upon monetary subjects asserts that it has been in operation since 1873, but I cannot say that I see it. I say that the fall in prices in this country since 1873 is due to deficiency of standard metal. He asserts that the fall in the gold price of all articles from silver standard countries is due to, and largely measurable by, the fall in the gold price of silver, and instances it by tea from India in a manner which I must say it is difficult to dispute. He further asserts that if the fall is due to the deficiency of gold, the estimated fall in prices from that cause must be added to the demonstrated fall resulting from the increased silver price of gold. When this is done the fall is not found to be so much as the combined asserted causes should produce. He therefore concludes that the fall of prices is mainly due to the fall in the gold price of silver. I cannot say that I agree to this. Some bi-metallists, I know, take his view of this matter. He asserts,

and I think I must agree with him in this, that if the gold price of silver suddenly becomes thirty pence per ounce, there must be an adjustment of gold prices or silver prices generally in silver standard countries, or gold standard countries, or in both, to meet this change and to regulate international interchanges between such countries. He thinks it would take the shape of a fall in gold prices.

Mr. M.—There is a question I should like to ask of each of you before giving you my definition of money. Do you feel that you have a “masterly skill in bullion and coin?” I ask this question because I expressed the hope to one of the most prominent of the Commissioners of the Royal Gold and Silver Commission of 1886-9, during the sitting of the Commission, that he and his coadjutors would show themselves mighty among the grains of standard metals. Subsequently I met with this passage in Wm. Horsley’s preface to the *Universal Merchant*, written in 1753:—“The acquaintance with the exchanges, however it may seem to some the business of merchants only, in commercial free states, falls properly under the cognizance of gentlemen, particularly those who have or intend having any share in the Legislature, and still more materially such who are in the immediate direction of public affairs, as without a masterly skill in bullion or coin it is impossible to understand the exchanges, whence singular inconveniences may happen in delicate emergencies. There is not any article of trade in which

the gentleman should not be a tolerable theorist; but in bullion and coin, whereby other articles are usually adjusted, he should be practically skilful.” I ask each of you, therefore, if you have a “masterly skill in bullion and coin?”

Mr. C.—I really do not know what you mean, but I am disposed to think that the question would have no point if notes and other credit pieces of paper were made the standard and gold and silver became the tokens of paper, and took their real proper place as small change. This is what should be arrived at. This the world must ultimately come to, I am convinced.

Mr. B.—I know nothing about the exchanges. I was talking with Grenfell the other day, and I find that he is just in the same condition. I sometimes wonder if our state of ignorance is the general portion of bankers. Grenfell told me that he had heard that there is a book from which children can gain this skill, so far as it is connected with the foundation of metallism. I rather think I looked into it once. One part appeared to me too childish to trouble oneself with, and another part bristles with statistics which I hate, and, besides, it reads like jargon. What have we got to do with such an elementary subject as bullion and coin? The greatest part of the transactions of the world are carried on by credit instruments. Let our great and only reservoir, the Bank of England, keep enough gold and silver bullion and coin to ensure

the encashment of these credit instruments, and our monetary system will be all right. Many of the directors of the Bank of England have not risen to the grandeur of the science of universal bi-metallism, but they are as sound as I am upon the importance of a sufficient reserve of standard substance to meet all probable claims for the encashment of credit instruments.

Mr. M.—Well, Mesites, what answer are you going to make to this question?

Mr. E.—My life has been spent as an exchanger of gold and silver and credit instruments. My fortune is made by an intimate acquaintance with the money markets of the world. With regard to the world's standard substances, gold and silver, I know the expressions for the same weights of these in each country of the world, here in gold, there in silver, according to the standard of the country; and both in silver and gold each day, as the gold price of silver and the silver price of gold fluctuate in countries wherein both metals are unlimited legal tender. I know the metal points between all countries, to ascertain which I am up in the charges of all mints. I know to a nicety the packing, carriage, shipping, freight, insurance and brokerage charges on the purchase and moving standard metal between all countries. I know that between countries possessing effective metal standards rates of exchange are definite weights of standard substances. I know the exact weights of gold and silver meant by the quotations of exchange published in the daily newspapers between

such countries. I know that there is no difference in value between bullion and coin wherever there are no coinage charges. By a glance at the gold price of silver in a gold standard country, and at the silver price of gold in a silver standard country, I perceive the proportionate weights of gold to silver indicated by the quotations. I know immediately that I see a quotation of exchange between two countries whether the two countries possess effective metal standards. If the proportionate quantities of gold and silver established by the world's market price of gold for silver or silver for gold is vastly less than the proportion yielded between the two metals by a comparison of the quantities indicated by a rate of exchange between a country having an effective gold standard and a country with a professedly silver standard, but in which the paper currency is inconvertible, I can measure the depreciation of the paper currency by the exchange quotation within a fraction of metal points. I am fully alive to the value of Norman's Exchange Calculus, to which well-merited testimony has been given by three leading German political economists. I admit that the knowledge of this Calculus is of more value than the possession of a universal coin, for it renders such a coin unnecessary. It enables any child who can work decimal multiplication and division to ascertain in a moment the pars of exchange between all gold and silver coins and moneys of account in any one or all countries of the world. I know that there are twelve gold standard and fourteen silver standard

weights which command the exchanges of the world. These weights, in fine gold at mint issue weight, range from 1·02 grains for the piastre in the Ottoman Empire, to 113·006 grains for the sovereign in the British Isles and throughout large tracts of the British Empire; the weights of fine silver range from 7·222 grains for the banabat in Persia, to 5·085 grains for the tael in Shanghae. I am sensible that Miss Sharland's and Mr. Norman's work in *Coin of the Realm*, &c., and *The Exchanges upon a Scientific Basis*, has opened up to the public of the world at large information which we exchangers have kept to ourselves. I do not repine at this. Competition reduces our profits to a minimum. Only those in the business can know whether a country is receiving or parting with its standard substance, and upon that must depend the rate of exchange. The public may know the pairs of exchange and the metal points, *i.e.* the limits to the fluctuation of the exchanges, but that is not near enough for business. I am quite aware that few who deal in exchanges think of definite weights of fine metal. I am certain that very few of the people of the world know that price in a country possessing an effective metal standard is a definite weight of standard substance, but it is so. The instance of tea in the *Exchanges upon a Scientific Basis* illustrates and demonstrates this. I think, perhaps, that I have said enough to entitle me to be credited with "a masterly skill in bullion and coin."

Mr. M.—I am very pleased with your remarks,

and the testimony you bear to the value of Miss Sharland and Mr. Norman's work.

Mr. C.—Well! I never heard this before. I begin to see that a standard substance is of vast importance. If all this springs from sound doctrine, I shall have to re-examine my faith.

Mr. B.—This is really interesting. I think I ought to try to know something about it.

Mr. M.—I do hope that you will not only try, but that you will also succeed. But I believe that if all do not succeed it is due to deficient education. If people decline to look into the subject with the determination to master it, because of age or any other equally foolish pretension, urging that it is too elementary for them to take it up, they must continue in ignorance. It is my opinion that everyone who has not "a masterly skill in bullion and coin" is presumptuous if he talks upon metallism at all. He must be in ignorance of the very foundation of monetary science.

Mr. C.—I should like to ask Mesites how he knows the weights of metals indicated by rates of exchange.

Mr. E.—Each country has a denominational expression for one grain of fine metal, be the standard gold or silver. The quotation of exchange divided by this expression gives the weight; for instance, F25·22 for £1. The expression for a grain of gold in France, as per Norman's Exchange Calculus, is 22·32 cents. Francs 25·22 divided by 22·32 cents gives 112·993, which are grains. The expression for a grain of gold

in Great Britain is, according to the same tables, 2·124 pence. A pound, or 240 pence, divided by 2·124 gives 113·0016, which are grains. So that France gives on this quotation 112·993 grains of fine gold for 113·0016 grains of fine gold in the British Isles.

Mr. C.—Thanks, Mesites, I see that; and I hope to make use of the knowledge. Now, Monnummus, pray give us your definition of money. I have heard so much from you and Mesites that I did not know before that I expect your views on this will be novel also.

Mr. M.—Before giving you this, I must tell you what I consider to be the conditions of a scientific automatic standard for monetary purposes. They are these—

- I. The substance which has been selected must have cost value and exchange value.
- II. It must be received in unlimited quantities from anybody, and any place, by the authorities of the country appointing the standard. It must be fitted by these authorities for monetary purposes.
- III. The substance must be appointed unlimited legal tender. The substance selected must be suitable as far as possible to the wants and habits of the people, out of which the standard must grow; it must be in considerable use as an intermediary in exchanges among them, and such as is generally desired

by large populations of the earth for other than currency purposes. For an effective metal standard all State notes and other credit instruments which form part of the currency must be encashable without question or delay, and for the actual weight of the standard metal indicated upon the face of the credit instrument. These conditions would appear to secure an effective metal standard for currency purposes. If any one of these conditions is wanting there would not be an effective metal monetary system, neither for the conduct of internal nor for international exchanges. These conditions imply as essential, that *the true standard can never bear an agio, or premium, in the terms of either another metal or inconvertible paper.* The standard substance thus conditioned might be wheat in bulk answering to bullion, and wheat in bags answering to coins; if a valuable substance is to be taken as the standard, the means of payment and the basis of all payments.

I suppose you do not offer objections to these terms and conditions of a standard?

Mr. C.—If the standard of value must possess intrinsic value, I should suppose that these conditions are sound.

Mr. B.—I do not object to the conditions. I do not see that they in any way limit the standard to

one substance in one country. I think two substances can be tied together and caused to act as one substance. I do not assert that you could tie three different substances together and cause them to act as one true, just, and lasting standard. But now let us hear your definition of money.

Mr. M.—In my opinion, money is simply and solely the standard substance—as gold in the British Isles and silver in India. I limit the term money to the standard substance for the following reasons. It is ordinarily—as it is intended to be—a measure of general and particular values, though itself of variable value. It has ordinarily an exchange value in some near relation to its cost value. Other instruments of exchange, token coins included, are not intended to have a correlative value with those things for which they exchange. All credit instruments, in a monetary system embracing both a standard substance of value and credit instruments, are true economisers of the use of the standard substance. It is no exaggeration to say that in every transaction into which price enters, where there is an effective metal standard, the actual weight of standard metal is as good as weighed out; for accepted tokens have equal force on prices with the standard substance, though they are only the sign of the thing signified.

Mr. B.—I do not know that I have any objection to offer to your definition. I would ask you one question. *If you could be assured that for all time the output of gold and silver and the relative cost*

of production would be at, say, 25 parts of silver to 1 of gold, would you object to the bi-metallic scheme?

Mr. M.—You have put an impossible hypothesis. How can I be assured? If I look to history I see, according to the best available records, that for 40 years, which ended in 1620, the proportionate weight of silver to gold extracted from the earth was 53 parts of silver to 1 part of gold. In the 40 years ended in 1811 it was 48·5 parts of silver to 1 of gold. This matter of proportionate weight of silver to gold is one factor in the problem. Then there is the other factor—cost of production. This latter is of vast importance in a measure of value of intrinsic worth. With regard to this, Professor Roberts-Austen, assayer of the Royal Mint, London, furnished the Royal Gold and Silver Commissioners with an estimate, showing the gold cost in 1883 of 88 $\frac{3}{4}$ millions of ounces of fine silver at 20 pence per ounce of 480 grains. His formula was subjected to the severe criticism of the Mint Master of the U.S.A., who furnished his mode of arriving at 25 $\frac{1}{2}$ pence per fine ounce, or equal respectively to 18 $\frac{1}{2}$ and 23 $\frac{1}{2}$ pence per standard ounce. Norman has gone very fully into the comparative average cost of the production of gold and silver upon figures furnished for two years by the American Mint authorities, which have been examined by the London Royal Mint authorities, who could offer no objection to them. He accepted corrections from the President of the

Colorado Silver Alliance for the silver yield and cost of the same for Colorado, in comparison with information received from the Mears Chlorination Company for the gold yield of the world, and found the proportions 97 parts of silver to 1 of gold. Assuming that the proportions of output of the two metals again becomes 53 of silver to 1 of gold, and the comparative cost of production something nearer to the value-giving factors embodied in each, then the yield in 40 years at the proportion of $15\frac{1}{2}$ of gold to 1 of silver would become £2,640,000,000, or nearly four times as much as the present estimated silver in the world, devoted to monetary purposes. If during those 40 years all the Mints of the world could be open to the unlimited reception of silver, and it be made unlimited legal tender everywhere, prices would be so inflated that it might cost 80 to 100 parts of silver to produce 1 part of gold from the earth, whereas 1 part of gold could be withdrawn from the currency for $15\frac{1}{2}$ parts of silver, and all the gold would disappear, having been withdrawn for other than monetary purposes. Silver would be the universal standard. Another conclusive reason against local dual standards is that this is the champion country of free trade, and a fixture of relation must act as a protection to one or other of the precious metal producers. This in itself should be a sufficient reason for this country to decline to entertain the bi-metallic scheme. Besides, there is no security that adopted universal bi-metallism would not become

universal mono-metallism on the cheapest metal, if all were true to the Union; no certainty that countries entering into a Bi-metallic Union would keep in it; no security that countries in the Union, and desirous of keeping in it, might not be forced from one cause or another to resort to an inconvertible paper currency; no assurance that a combination of the most intelligent would not be formed to make contracts alone upon gold. There are 103 empires, kingdoms, states, islands, &c., the interchanges of which are professedly based upon gold and silver, or both; of these not more than five possess at the present time scientific automatic metal monetary systems, at the head of which stands the British Isles. Germany has followed these islands to her satisfaction. Her rulers and political economists, in my opinion, would never consent to any change; she has no India, and cannot be particularly desirous to benefit France. Prince Bismarck has emphatically told the world, through the representatives of the agricultural classes of his country, that he will never allow anything to be done which would debase the gold in his war chests. Another insurmountable objection which I have to local dual standards is the not only possible, but highly probable, unfairness of the international interchanges to which a non-producing precious metal country may be exposed under this system. We have seen that the terms of barter are value-giving factors in anything for value-giving factors in anything. In the interchanges

between countries, goods and securities parted with pay for goods and securities received. Gold and silver, like copper and tin, are goods obtained by mining, and the conditions of the exchange of them should be as free as that of copper for tin. If a relation is fixed between gold and silver, say 25 parts of silver to 1 part of gold, and the actual comparative cost of production is 80 parts of silver to 1 part of gold, the Mints of the British Isles being open to the unlimited reception of silver in the proportion of 25 parts of that metal to 1 of gold, what would follow if the output of silver should become of historical proportions? The British Isles do not produce the precious metals, and for such as may be brought into the country the country must pay. Grenfell, at one time, thought that the Mints of India being open to the unlimited reception of silver there could be no limit to the amount that country could absorb. He had to learn that India could only take such a quantity as she could pay for. But should the silver miners of the world, under the conditions of the question, be satisfied with consols, British railways, or other property of a similar nature which is possessed by the people of the British Isles, they could exchange their silver, costing them at the proportion of 80 parts of silver, more or less, for 1 part of gold, at 25 parts of silver for 1 part of gold, for such properties. This exchange amounts to this, that we should be giving the miners value-giving factors represented by 80

for their value-giving factors represented by 25, showing a profit to these gentlemen of 220 per cent. The following reasoning has long ago closed my mind against the practicability of Bi-metallism or local dual standards :—

I.—“Gold and silver are different substances.”

II.—“No two different substances can be exchanged for any length of time on parallel lines of quantities or values, neither can they be produced for any length of time on parallel lines of cost.”

If there is one thing more than another which should be most carefully guarded and preserved in as stable a form as possible *under automatic action*, it is the matter of a standard of value and a means of payment. This standard, in any one country, can no more consist of two substances than it can consist of three substances. M. Cernuschi has recently made the statement “That an ounce of new metal has the same power as the ounce of the same metal produced 2,000 years ago.” An ounce of gold is always an ounce of gold; so also an ounce of silver is always an ounce of silver. If he means that the ounce produced 2,000 years ago has the same power as that produced to-day; that power in exchange value being, perhaps, vastly different to what it was 2,000 years ago, I agree with him; but in no other sense. The purchasing power must be altered by the quantity, or the cost of production, or by both in

operation at the same time, or by one operating against the other with various forces. Besides these forces, which tell upon a metal measure of value, there are other factors affecting price quite apart from the metal.

Mr. B.—I am surprised at the erroneous statement you have just made, Monnummus, about the impracticability of local dual standards, as you please to call them. I assert unhesitatingly, and without any qualification, that for seventy years France possessed one standard consisting of two metals, gold and silver. These metals were tied together by the bi-metallic law, and though they are two metals they became by this law one standard, being both together one measure of value and one means of payment. It was a matter of perfect indifference to anyone which metal he was offered. Either suited him as well as the other.

Mr. C.—I have always heard that during the seventy years you allude to, in France, her metal currency was at one time silver and at another it was gold. I should like to know, if there was really no difference between the value of the two on the fixed proportion, how this could possibly have taken place.

Mr. M.—Oh, yes. Binnummi will admit the changes in France during the seventy years, and more; that the dearest metal for the time always commanded an agio, or premium, in the cheaper metal. But he would put a stop to that by all the world being compelled to take either at the fixed relation. Since this discussion is mainly an argument against this view, I need not

specifically advance any reply to this here. But I would say that I doubt whether there would not be an agio, or premium, upon the underrated metal in the overrated metal, even if the whole world could be brought to embrace bi-metallism. This I do unhesitatingly advance: that there can be no scientific automatic metal standard monetary system in which the standard substance commands an agio, or premium, in any other metal or in credit instruments.

Mr. C.—You have completely turned things round, Monnummus. My idea is that the standard substance should be State notes—I think I may almost say anyone's notes—payable on demand, and that the tokens should be gold, silver, and copper coins. I should like to hear what Mesites has to say on Monnummus's definition of money.

Mr. E.—Before answering your question, I would advert to interchanges of commodities and properties between two countries both possessing State issued paper as their standards and sole currencies. Take France and the British Isles. The nomenclature may be the same as now: in France, francs and cents; in the British Isles, pounds, shillings, and pence, paper representing each. We have now the signs, and we must banish all idea of the things which were hitherto signified; that is, definite weights of gold and silver. Let us say that in the British Isles the State makes excessive issues of notes, and that in France the State makes only moderate issues of notes. Excess or moderation can only be judged of by supply and demand. If

the counters are superabundant, they will be used in large quantities for a given value of goods and securities. If the counters are not superabundant, they will be used in less quantities for the same value of goods or securities. In the one country prices will be high, in the other country they will be low, for the same value-giving factors embodied in anything. Under these conditions, if I apprehend Monnummus aright, I do not agree with him in concluding that there would be no exchange relation between the two countries. In my opinion there would be exchange operations, or bill transactions, between the countries, as though the basis of the currencies of the two countries consisted of standard metal; but our business as exchangers would be much limited, since we should have nothing to do with bullion or coin for such countries. Not until the millennium could the French slips of paper become current in the British Isles, or the British Isles slips of paper become current in France. In the other part of Monnummus's proposition on this question I entirely agree. I do not enter on the question of anybody's notes, Creditus, because no State would pass a law that such must be taken as a medium of exchange in unlimited quantities, or that they must be taken at all as payments and legal tender. I assume that State-issued paper is by law made unlimited legal tender. Now I will give you my opinion on Monnummus's definition of money. It is decidedly different from that generally held in the present

day. You have only to read the second Blue Book issued by the Royal Gold and Silver Commission of 1886-9 to see this. That book appears to me to consist chiefly of a miserable effort to elevate credit instruments to the same platform as standard substances. I know that between all countries possessing effective metal standards, it is by paying close attention to bullion and coin alone that I can conduct my business satisfactorily. Between these countries bullion and coin govern my business. Of course, I watch every turn of exchange within metal points, and promptly effect an arbitrage which will give me any profit. I know my limits in doing business with such countries, and the extent of the risks I run as far as changes in their currencies are likely to affect me. The conditions of the currencies of such countries is automatic, and this is of vast importance. It is not so with countries possessing inconvertible paper currencies, such just now, as Russia, Austria-Hungary, Brazil, the Argentine Republic, Chili, and Peru. Nor was it so with France, Italy, and the United States twenty years ago, when the currencies of those countries were inconvertible. Under such monetary systems, being constantly subject to changes through the autocratic issue of inconvertible State notes, the exchanges are subject to greater fluctuations and require even more watchfulness than those exchanges which are based upon effective metal standards. These are and were autocratic currencies, really based on metal, when

the standard metal could be purchased with their paper, but always subject to violent disturbances by the action of the dealers in the standard metal, whose operations are known to the world as "rings" and "corners." Wherever the standard substance cannot be obtained for inconvertible notes, there the currency has no connection with metal, and is of an autocratic register character, under the classification of countries whose currencies are confined to State-issued inconvertible notes alone, as legal tender. I do my business as much as possible on the principle which seems to so largely govern all business of the present day, of selling before purchasing, and so securing a profit, however small it may be. I am inclined to think that the standard substance in the form of bullion and coin appropriated to monetary purposes is a better definition of money than many others. It is certainly nearer to that of Locke's time, and then there was no definition of the terms and conditions of a standard such as we have heard to-day. Whether that definition is right or wrong I do not offer an opinion. Perhaps this definition of money might serve to demarcate more markedly than at present the vast difference between a standard substance of intrinsic worth and its token of no intrinsic worth. It might also lead to greater attention being paid to the study of the science of money, or the standard substance, which, though ingrained into me from the very nature of my business, has been too much neglected by bankers, who are better

acquainted with the science and laws affecting credit instruments, or token money.

Mr. C.—There is another objection which I offer to this metal standard system of money. I understand, from what Monnummus says, that under Binnummi's local dual standard system there has been a constant changing of silver for gold and gold for silver; so that in one country, if not in others, the actual standard measured by the metal for which an agio or premium has been given in another metal has at one time been gold and at another time it has been silver. I suppose, Mesites, you have no objection to offer to this? But whatever you make out of these needless changes of metals must burden some one. Notwithstanding all that you, Monnummus, Binnummi, and Mesites say, an inconvertible note standard is surely the best. You would get rid of many difficulties and burdens by adopting it. Mind you, I think it might be well to have gold and silver as small change. Look at the United States, America. Does anyone doubt that if the Bland Act is continued long enough, and other circumstances favour it, the chief monetary metal will become silver, and that gold will command a premium in it? What perplexities they must soon get themselves into with these metal standards! Listen to what Mr. Logan C. Murray, who presided at the great meeting of the American Bankers' Association held last year, said at it:—"But what of the silver dollar? Has not this association repeatedly placed itself upon record as to

the continued coinage of the silver dollar, and lived in hope and anticipation of unity of action by the nations? The Royal Commission is certainly looking forward to an endeavour to get unity of action—they must have got this idea, Binnummi, from you, or one of your friends—*meanwhile our two great political parties are drifting into free coinage.* Hear what one of them says in a declared platform:—‘The Republican party is in favour of the use of both gold and silver as money, and condemns the policy of the Democratic administration in its efforts to demonetise silver.’ Now hear what the other great party says:—‘We believe in honest money, the gold and silver coinage of the Constitution, and a circulating medium convertible into such money without loss.’ Who, then, is now standing against free coinage? Neither of the political parties are opposed to it. This is very impressive. This also reminds me of an Irish cabman, when a gentleman said to him in Dublin, ‘See here, driver, I ordered a smart trap to drive in Phoenix Park, and you come round in rags unfit for a beggar.’ He answered, ‘I know it, your honour. I would like to wear fine clothes, but there is not a tailor in all Dublin as can take me measure, I am that d——h ticklish.’ We will rest our case without recession from our former declaration, ticklish as it is, in politics. Our only hope is in international co-operation for a common standard.” This is all very fine, Binnummi. The term “rags,” perhaps, is sufficiently descriptive of the substance; for silver is now

generally spoken of from the top of Canada to the heel of all the Americas as ship's ballast. If you will not embrace my system, I think that the British Isles are quite right in their determination to preserve the monetary system which they have. France and the Latin Union, such as had the gold to part with, should have worked the thing through and given their last grain of gold for silver.

Mr. E.—I have never made any objection to the constant exchanges of gold for silver and then silver for gold. This is a part of my business, and of course I profit by it. I only act under the laws of the countries I deal with. No doubt, Creditus, you are right. Knock away all metal or any other substance of value from all monetary systems, and our operations would be confined to paper instruments as intermediaries in the interchanges of commodities and properties. I should like to set you and Binnummi to write essays upon this question—“What are the differences between the raising of coins, bi-metallism, and the excessive issue of inconvertible paper, in their respective effects upon prices, the morality of such procedures, and the adequacy of the measures to accomplish the object in view?”

Mr. B.—I have no doubt that I could give an answer to this question which would completely defend my position.

Mr. C.—Before attempting it, I shall certainly try to become possessed of the masterly skill we have heard about. Though I am getting on in years, I

think if I was put to it, and helped, I might hope to understand as much as children can do in the matter.

Mr. B.—You must admit, Monnummus, that this breakdown of the bi-metallic law has benefited the Indian wheat trade and injured the farmers of the British Isles!

Mr. M.—I cannot see that it has done one thing or the other. The conditions of barter have been satisfied. The altered state of prices has not affected the one or the other. Money has been moulded to the conditions of barter.

Mr. C.—I should like to see your proof of this in connection with Indian tea.

Mr. M.—You must know that everything which comes from countries possessing effective silver standards, and is used in this country, is as good as weighed out, probably more than once, against a weight of silver in, say India, as a silver standard country; and is also as good as weighed out in this country more than once against gold before it is used here. Altered proportions, therefore, between gold and silver must alter prices, quite independent of anything affecting the articles priced. As an instance, take Indian tea. The planter in Assam has paid silver to his labourers, and for other necessities in connection with the production and packing of it. He would send the tea to his agent at the seaport, with instructions to sell it there. The buyer would pay silver for it, having ascertained upon what terms *silver in India could be exchanged for gold in the British Isles*. He

sends the tea to London, and sells it at auction in the Mincing Lane tea market to a tea dealer, the buyer paying gold for it. At length it comes into your possession, you having paid gold for the same. The tea might have passed through more hands than those mentioned before it came into yours, both in India and in the British Isles, but the possessor of it each time practically weighed out either gold or silver for it. It should be particularly noticed that the purchaser in India first ascertained at what rate he could exchange silver for gold before he parted with his silver for the tea. It may be asked why he did this. He had parted with his silver, and got the tea instead; he would have nothing more to do with silver in the transaction. True. *But he has bought the tea for the purpose of selling it for gold in the British Isles.* Assume that your spoonful of tea is part of one pound, which has cost you 2s. 6d. per lb., of which 6d. was for duty. Assume that the purchaser of tea in India has to do with the remaining 2s. We have to account for his anxiety to know at what rate he could exchange silver for gold before he purchased the tea. Say that his position in India was 10 lbs. of tea for 10·96 rupees, or 1,808 grains of fine silver. He is going to sell the tea for gold in the British Isles, and he must ascertain how much fine gold embodied in pounds sterling are equal to 1,808 grains of fine silver. He finds that the rate of exchange is 21·88 pence per rupee, or 10·31 grains of fine gold for 165 grains of fine silver; so that his 10·96 rupees

are worth £1, or 113·0016 grains of fine gold. On this exchange, by selling to you one pound of the tea at 2s. per lb., he makes nothing. But assume that exchange has altered in India, and has become 15·56 pence per rupee, or 165 grains of fine silver for 7·33 grains of fine gold, whilst the price of tea in India has remained the same, viz. 1,808 grains of fine silver, or 10·96 rupees per 10 lbs. Under these conditions the cost price of the tea stands at 14s. 3d., or 80·86 grains of fine gold, and could be sold at a trifle more than 1s. 5d. per lb. The difference between 1s. 5d. and 2s. is 41 per cent. It is hardly necessary to state that the competition among producers, merchants of tea, and others, would reduce profits to the ordinary level, and the consumer would get the immediate benefit of the reduced cost of the tea in the British Isles. No Indian merchant in London doubts the correctness of this view. And all must perceive that it is in keeping with one of the first principles of political economy. If this fact is kept in view by students of currency, Chaplin's speech in the Commons, of 4th June 1889, would appear little better than a bag of wind.

Mr. B.—I am amazed to hear you speak of Chaplin's speech in this way. We think that no finer, fairer, or more convincing exposition of this difficult subject could have possibly been given. If only the Legislatures of the world had men of Chaplin's penetration and wide grasp of the subject, the truth as we understand it would quickly become universal.

But since you say that current interchanges, being conducted on the conditions of barter, are not affected by alterations in money, and that more or less counters, or in other words high or low prices, are of no importance, since if a man gets a high price he gives a high price, and if he gets a low price he gives a low price, I cannot see why bi-metallism is not better than monometallism.

Mr. M.—A standard as stable as possible is of the utmost importance in connection with deferred obligations. If the shallowness of Chaplin's argument in the Commons can be blown to atoms by one of the first axioms of political economy in connection with the use of a monetary intermediary, equally so can S. Smith's argument in his *rechauffé* speech which he made in support of his motion. As I read that speech I was impressed with the vast importance of an intrinsically valuable standard of value and means of payment. Let me instance this with facts and assumptions drawn from the present monetary system in Peru. A Peruvian paper sol or dollar is worth just now one and a half-penny. Say all Peruvian paper sols are not worth more. Silver is the standard in Peru. The silver or paper sol should contain or exchange for 347·228 grains of fine silver. Take the following premise. Three periods in the hypothetical history of Peru: 15 years ago, the present, and 15 years hence. During the whole time no change in the value-giving factors embodied in exchangeable articles. Also no

change in Peru in the purchasing power of silver during the 30 years. That during the whole time a paper or a silver sol are equally legal tenders. That in 1874 the silver and the paper sol were at par, and they will be at par again in 1904. One and a half-penny at 16 parts of silver to 1 part of gold would be 11·3 grains of fine silver. Comparing the respective positions of the debtors and creditors in 1889 in connection with their engagements made in 1874, and of the debtors and creditors in 1904 in connection with their engagements contracted in 1889, the following positions are shown. The debtor in 1889 pays value-giving factors embodied in substances represented by 11·3 grains of fine silver for value-giving factors embodied in substances received by him in 1874 and represented by 347·228 grains of fine silver. In other words he pays thirty times less in real value than the amount he borrowed. By the same amount the creditor receives less than he lent. Comparing the position of the two parties in 1904, it is at once seen that it is reversed, the creditor getting the benefit which the debtor before enjoyed. Can anything more forcibly demonstrate, though it be in an exaggerated form, the tremendous importance of preserving a substance of value as the basis of a monetary system, when once it has been obtained? No action of the British Isles brought the operation of the bi-metallic law to a conclusion. The best thinkers in these islands have been telling

the world, including the Latin Union and America, from the time of John Locke to the present moment, that two standards in one country are opposed to all sound principles and therefore cannot succeed. That it succeeded, if it could be called success, for 70 years offers no assurance that it can be preserved for twice 70 years more. I have always found that when bi-metallists are shut up to the ultimate one standard, and that the cheapest as the certain results of the universal local dual standard theory, they at once accept it, and reply, Well, and if so, what does it matter? Why, surely, it matters this, that their admission destroys their argument that bi-metallism is possible, upon any conceivable conditions.

Mr. B.—Well, there is no disputing this fact: that the finances of India are exposed to great danger through the constantly falling gold price of silver.

Mr. M.—How much worse are the finances of India now than they were in 1873? What new taxes have been imposed or diminution of expenditure enforced, as the result of the lower gold price of silver, or, to put it more correctly, the higher silver price of gold? No one can read S. Smith's remarks upon the evils he attributes to the fall of the gold price of silver without asking himself how it is that this country is solvent, and why universal bankruptcy has not overtaken it long since? There are compensations which would reduce the

most alarming views which he presents to dimensions which can be calmly surveyed. It is so with the Indian finances. I know it is said that the fall of one penny in the Indian exchange with London necessitates the additional taxation of India to the extent of 10,000,000 Rs. I am sure that the compensations which are realised would reduce this estimate most materially. It is wrong and misleading to definitely state such a high figure when it is known that there are important sets off which would vastly reduce it. Let efforts be made to arrive at a nearer statement of fact. There have been wars and famines in India since 1873, and vast expenditure connected therewith. So much of the expenditure on these from revenue must be ascertained; to aid in arriving, if possible, at a fairly correct estimate of the taxation imposed and economies enforced to meet the fall in the gold price of silver, due allowance being made for what the stores, &c. purchased here for all railways, &c. cost, compared with what they would have cost had there been no fall in the rate of exchange. There is certainly something to make one treat with suspicion these agonising cries of the Indian Government and its officials. In the July number of the *Bankers' Magazine*, under Stock Exchange values, you will find 70 $\frac{3}{4}$ millions of pounds Colonial Government stock; 907 $\frac{3}{4}$ millions Foreign Government stocks. Upon the interest of so much of these stocks as is held here payable by silver standard

countries there is the same percentage strain upon such countries as falls upon India. Have you heard any cries and groans from these countries? I begin to think that there are more compensations than most of us have any idea of. When the Chancellor of the Exchequer was reducing the interest upon the National Debt, I could not but reflect what a fearful injustice might be committed upon the fundholders, many of whom are very poor, though highly respectable, in the event of the establishment of universal bi-metallism, under the present aspect of the comparative average cost of the production of gold and silver, and the possibility of an almost immediate recurrence of historical periods of the relative outputs of the two metals, if a permanent relation were now fixed.

Mr. E.—Yes. It is not improbable that within a short time after the universal adoption of bi-metallism a sovereign in this country would not have greater purchasing power than a few shillings. A loud lamentation would then proceed from those who live on annuities, or other fixed incomes, and from the prudent poor who have saved money. If this thought took possession of the country, it might give the finishing stroke to bi-metallism for ever. For my part, I could never understand how anyone possessing a masterly skill in bullion and coin, and a knowledge of the terms and conditions of a scientific standard for monetary purposes, could by any possibility advocate local dual standards or bi-metallism.

Mr. C.—I wish you would tell us, Mesites, whether you think this subject of a country's monetary system is a proper one for international bargain and settlement. I should suppose that in this matter, if in any, each country should act quite independently.

Mr. E.—I take your view. A monetary system for people must be the outgrowth of their wants, trade, and civilization. It would be as unwise to give the East Indian gold as to give the American Indian silver. Neither of them are fit for the change. The system must be that which is most suitable to the state of the people, and not such as that upon which you think you can best regulate your interchanges with them. In the matter of currency, countries never have thought of other countries. The outcry for an universal coin at this time evidences this. When Germany had the opportunity to assimilate her gold currency to that of the British Isles she deliberately made her 20-mark piece of 110·6268 grains of fine gold, constrained by local circumstances, perhaps, the sovereign having 113·0016 grains of fine gold: the German alloy one-tenth, the alloy in the sovereign one-twelfth. The soundest policy is that each country should take care of its own monetary system, and let other countries take care of theirs. As for an universal coin, any child who has learned the use of Norman's Exchange Calculus does not require such a coin.

Mr. M.—It is getting late, friends, and we must be going to business. But before we leave give us, Mesites, if you will, your views in a summary.

Mr. E.—At your request, Monnummus, I will sum up my views very shortly.

- I. Monetary systems must differ as the peculiarities, habits, and civilization of different peoples differ. One country may learn of another, and one system may be thought to be the best to which a well-advanced people could attain; but changes must be slow and guided by sound views of the functions of money. That system which is best suited to the wants of the people for their internal interchanges must be first thought of, and must not be changed out of consideration for their international interchanges, until the proposed change suits equally well both descriptions of interchanges.
- II. A country's monetary system is not a subject for international discussion.
- III. With regard to four monetary systems:—
 - a. A standard of intrinsic value, as intermediary, without any credit instruments.
 - b. A standard of credit instruments such as State notes, as intermediary, with intrinsically valuable tokens.
 - c. A standard of intrinsic value with metal and credit tokens, the credit tokens convertible into the standard substance without question or delay for the weight represented.
 - d. A standard partly of intrinsic and partly of fictitious value, with metal and credit tokens,

the tokens convertible either into the intrinsically valuable substance or the substance of fictitious value at the option of the payer, without question or delay for the weight of intrinsically valuable substance, or the weight of the substance of fictitious value, both being represented under one denomination on the instrument to be paid.

I do not think that anyone can question the definition under *d* as being an accurate definition of bi-metallism. My opinion is that the world's transactions have outgrown the system *a*. The miseries people have suffered from inconvertible paper are stamped upon the world's history and sufficiently condemn it, *b*. That described under *c* is the only scientific system. Bi-metallism is described under *d*.

The object of our colloquy has been to show the error of this system and the damages to which the British Isles would be exposed if it were universally practised.

Mr. M.—I remember seeing in the *London Chamber of Commerce Journal*, not long ago, an instance of the reception of fictitious silver coins in Bombay from the head of the Persian Gulf, upon which I thought convincing reasons could be based against an universal coin. I am confident that each country should take care of its own coinage and monetary system, and that neither are subjects for international arrangement.

Mr. C.—Well, Mesites, there are no longer mysteries of your craft. I am glad that you do not object to the

public sharing in the knowledge you have so long had, but of which they are ignorant. It is evident that the key of the knowledge of the Science of Money is in the possession of "a masterly skill in bullion and coin." As there are writings which teach this skill, it shall be my effort to obtain it.

Mr. M.—If I may judge by my own experience, I am sure that anyone of ordinary intelligence can acquire this skill. Such as do succeed will join me in insisting upon the construction of a science primer of money. Also instruction on the subject to children with geography, for it is of more importance than the colour of the hair of the people of the country about which they may be learning. The rudiments of the subject are much easier to learn than the multiplication table. Good morning, friends.

from Prof. W. G. Graham Sumner
 The doctrines in Corn. of the Debit & are
 entirely unimpeachable & are well stated
 from Prof. O. D. Webster after receipt of the
 Colloquy. Dated 27-10-89
 "I thoroughly approve of the principles
 which you have advocated in your own
 means, meeting as usual to meet the
 perfect, & in proper currency which is
 not at all times convertible."
 J. H.

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